

REMARKS

Claims 1-10 and 18-23 remain in prosecution. Applicants affirm the election of group II claims 1-10 and 18-23 and have withdrawn claims 11-17 via this amendment. A one month extension of time and appropriate fee are enclosed with this amendment.

Claim 1 was rejected under 35 U.S.C. 112 as being indefinite. Claim 1 has been amended in view of the Examiner's comments, as amended; claim 1 is believed to be in condition to overcome the noted indefiniteness rejection.

Claims 1-10 were rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Independent claim 1 has been amended to further clarify the invention and as amended is believed to recite statutory subject matter. Claims 2-10 which depend on claim 1 are also believed to be in condition to overcome the noted rejection.

Claims 1-10 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Maru* (U.S. Pat. No. 6,516,444. Independent claim 1 has been amended to recite adjusting all of the original operand values "such that cross over from the maximum positive value to the maximum negative value is avoided". The cited *Maru* reference fails to teach or suggest adjusting the original operand values in order to prevent cross over from the maximum positive value to the maximum negative value. In one embodiment of the present invention this is accomplished by a quadrant shifter. As mentioned in page 10, lines 17-20, by avoiding this cross over, the problem of crossing the maximum positive/maximum negative value boundary is avoided. Given that the cited reference fails to teach or suggest this claim limitation, claims 1-10 are believed to be in condition for allowance.

Claims 18-23 were rejected under 35 U.S.C. 103(as) as being unpatentable over applicants' prior art figure 4 in view of *Maru* (U.S. Pat. No. 6,516,444. Independent claim 18 has been amended to recite "adjusting all of the original operand values such that cross over from the maximum positive value to the maximum negative value is avoided". *Maru* fails to teach or suggest an adjuster such as a quadrant shifter as disclosed in the present invention which prevents rotation from the maximum positive value to the maximum negative value (see page 9, lines 8-

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19) in order to prevent the problems associated with crossing over the maximum positive/maximum negative value boundary. Given this, claims 18-23 are believed to be in condition for allowance.

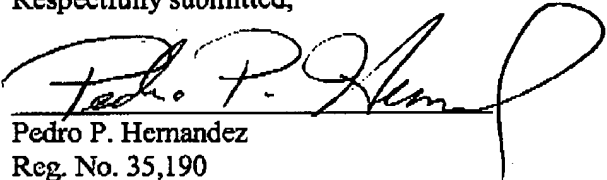
New claims 24-29 directed to a decoder have been introduced. New claims 24-29 are believed to be in condition for allowance given that the cited Maru reference fails to teach a decoder that comprises a quadrant shifter that includes a quadrant identifier, rotator and rotation selector as recited and wherein "the rotator in response to receiving the selection information rotates the input values to produce corresponding rotated values such that rotation from a maximum positive value to a maximum negative value is avoided". As such, new claims 24-29 are believed to be in condition for allowance.

Applicants respectfully submit that the present application is in condition for allowance. If the Examiner has any questions or comments or otherwise feels it would be helpful in expediting the application, he is encouraged to telephone the undersigned at (972) 731-2288.

The Commissioner is hereby authorized to charge payment of any further fees associated with any of the foregoing papers submitted herewith, or to credit any overpayment thereof, to Deposit Account No. 20-0668, Texas Instruments, Inc.

Respectfully submitted,

Date: 11/01/04


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